11/3/99-01327

RESPONSE TO AGENCY COMMENTS ON THE DRAFT FINAL PROJECT PLANS FIELD INGVESTIGATION, ENGINEERING, AND ENVIRONMENTAL SUPPORT NAVAL WEAPONS STATION YORKTOWN, YORKTOWN, VIRGINIA CHEATHAM ANNEX SITE NOVEMBER 3, 1999

Comments Provided by the USEPA, October 7, 1999, from Mr. Robert Thomson, P.E.

The following responses were discussed via telephone conference call on October 13, 1999, with representatives of USEPA, VADEQ, LANTDIV, and Baker.

Draft Work Plan

1. Page 5-6, Site 7

   EPA recommends the performance of geophysics to determine the location and extent of disposal activity. The Region suggests a combination of GPR and EM scans. The results of the geophysics can be used to ascertain proper hand auger locations at this site.

Response: Employment of a geophysical survey would lead to acquisition of data that would need to be confirmed via intrusive sampling regardless of the results of the survey. The Site 7 investigation is preliminary. A more detailed investigation will be proposed at a later date for this site should evidence of disposal/contamination be discovered.

2. Page 5-6, AOC 1

   EPA recommends that the proposed geophysics include a combination of GPR and EM scans.

Response: Agreed. GPR methods will be employed as well as EM.

3. Page 5-7, AOC-2

   One sample per 3ft. wide, 5ft. long, 4ft. deep pit is not sufficient to adequately characterize the site. EPA recommends 6 samples per pit at a minimum; 2 along the bottom, and one along each side wall, 2/3 the way down below ground surface, absent any notable contamination layer.

Response: The sampling is intended to characterize contaminated areas that are encountered, and is not intended to provided confirmation of removal of contaminants. As such, the proposed sampling scheme is appropriate.

4. Page 5-7. AOC-2

   Groundwater sampling needs to be accomplished to ascertain the source of elevated arsenic.

Response: At this point, groundwater sampling for arsenic does not appear to be warranted. However, should a potential source of arsenic contamination be discovered during this investigation, a subsequent groundwater investigation will be considered.

Draft Sampling and Analysis Plan

1. General

   If ash material is encountered, EPA recommends that dioxin analysis be included in the sampling parameters.

Response: During the Site Investigation (Weston, 1992), dioxins were not detected in samples collected from Site 1. Due to the nature of dioxin analysis and the existence of previous data additional dioxin analysis at Site 1 is not recommended.

2. Page 3-2, Section 3.2

   EPA recommends that geophysics be performed at Site 7 as outlined above.

Response: See above response for Comment 1 on the Work Plan.

3. Page 3-4, Site 7

   One surface soil sample is not sufficient at the Old DuPont disposal area. The size of the sampling event should be determined on the results of the geophysics. Also, what about the analysis of the hand auger samples??

Response: The Site 7 investigation is preliminary and intended only to determine if buried wastes are present. Should evidence of buried wastes be discovered, a more extensive investigation will be planned to characterize the site.

4. Table 2-1

   EPA requests that TIC data be provided for the sampling event.

Response: Baker will request TIC data from the analytical lab. If provided, this data will be forwarded to the USEPA.

Comments Provided by the VADEQ, October 12, 1999, from Ms. Sharon Wilcox, CHMM

1. Page 2-6. Please confirm that both Penniman Lake and Cheatham Pond were constructed in 1943. If the information is available, please indicate when Jones Pond was constructed.

Response: The exact dates of construction are not presently known, but will be investigated further in the future. The 1943 construction date for Penniman Lake and Cheatham Pond was reported in the 1998 DON document titled "Environmental Assessment for Recreational Cabins at Fleet and Industrial Supply Center Cheatham Annex." Other Navy information indicates creation of Penniman Pond in 1955 and Cheatham Pond in 1956. From the EPIC Study photographs, Cheatham Pond is not present in 1942, but is present in 1955. Penniman Lake appears to be present in the 1937 EPIC photograph. Jones Pond is present on a map of Williamsburg dated 1906 that was presented in the Architectural and Archeological Assessment

that was prepared in 1994 by Goodwin and Associates. It appears that Jones Pond was constructed concurrently or prior to construction of the Colonial National Historical Parkway.

2. All samples at Site 1 should be analyzed for PCBs and pesticides.

Response: Agreed. The Site 1 environmental samples will be analyzed for pesticides and PCBs.

3. Typically, a minimum of 8 to 10 TCLP samples, or more, would be needed to meet the statistical requirements of SW-846 in determining whether such a large volume of waste as Landfill 1 would be characterized as a hazardous waste. Obtaining 2 composite samples would not this requirement. Furthermore, given the number of borings, there is concern that volatiles may not be preserved through the compositing and homogenizing process.

Response: The Site 1 sampling scheme will be discussed at the November 10, 1999, meeting at CAX. Baker concurs that more than two samples may be required.

4. The plan does not indicate any efforts to remove surface debris from Site 4. Though the Department desires the site to be fully characterized before the surface debris are removed, so as not to remove surface evidence of likely disposal areas prior to characterization, it is concerned that these material be removed as soon as the site has been fully characterized.

Response: Future removal of the debris will be considered pending the findings of this investigation.

5. The Department concurs with EPA's recommendation that a subsurface geophysical investigation be performed at the site in addition to the hand auger confirmatory search.

Response: See above response to USEPA's Comment No. 1 on the Draft Work Plan.

6. All samples at each of the sites that include TAL / TCL analyses should also test for PCBs, Pesticides, Nitramines and Nitroaromatics.

Response: Agreed, with the exception of AOC 2. The 1998 Field Investigation surface soil, subsurface soil, and groundwater samples were analyzed for nitramines/nitroaromatic compounds and exhibited no positive detections. As such, no analysis for nitramines/nitroaromatic compounds is proposed for AOC 2.

7. Waste characterization of the soil at AOC-2 should consider not only the results of the TCLP sampling analysis, but also the results of the TAL / TCL samples.

Response: The TCL/TAL analysis will not be available in sufficient time for consideration for waste disposal characterization. These samples will be analyzed on a 28-day turn, and will then be submitted for independent, third party validation. The TCLP samples will be analyzed within 10 days. This topic can be discussed further during the November 10, 1999, meeting at CAX.

8. Page 5-8. I am uncomfortable with referring to the wells at Site 1 as "temporary" wells. They are permanent wells which will not be surface finished until construction decisions are reached regarding the landfill.

Response: The text has been revised to refer to the wells as monitoring wells rather than temporary monitoring wells.

9. As Tables 3-2, 3-3, and 3-4 list the analytical parameters sampled in prior investigations, it is hoped that the analytical results from those investigations will be included with the results from this investigation in the report to be submitted.

Response: The subsequent reports will include summaries of previous analytical results.

10. The Department believes that sediment samples should be obtained in the swampy area and Youth Pond shown in Figure 3-2 to rule out migration of potential contaminants to these sensitive areas. Please recall that a drum of "waste oil ?" was removed from near the culvert between these two areas. Therefore it is reasonable to assume that the area of debris might extend further than is currently identified in the figure.

Response: The waste oil drum is suspected to be unrelated to the medical supplies disposal at Site 4. The objective of this investigation is to characterize the soil and sediment in the immediate vicinity of buried supplies. Should significant contamination be detected, investigation of the swampy area and Youth Pond will be considered for a subsequent investigation.

11. Please identify the purpose of the retention pond identified in Figure 3-5. Does it receive discharge from the water treatment plant, or is it at the intake point? Please indicate the intake point for the drinking water at Cheatham Annex on this figure, if feasible, or on another figure as necessary.

Response: Jones Pond is the source of CAX's water supply. Water is conveyed to Jones Pond via several unnamed tributaries, overland flow, and direct precipitation. Groundwater recharge may be another source of replenishment. The retention pond (within the fenced-in area) receives water treatment plant effluent resulting from backwashing and other processes. Water is disharged from the retention pond to an unnamed tributary to Jones Pond. (This tributary will be investigated as part of this study.)

12. Page 3-4, S & A plan. The plan did not appear to include samples to be taken of the surface and subsurface soils in the darkly stained area and near the former tank(s). Please clarify.

Response: During the November 10, 1999, meeting at CAX, it is recommended that these areas be visited, and, if appropriate, the proposed sample locations can be reconsidered.

13. pH and ORP potential are two other parameters to be monitored to determine well stability. Please include and record them as well. If there is redundancy with specific conductance, please explain in your response.

Response: Agreed. These parameters will also be recorded during monitoring well